

YG-1 CO., LTD.

YG-1 USA

730 Corporate Woods Parkway, Vernon Hills, IL 60061 U.S.A.

Phone: +1-800-765-8665

Technical Assistance: +1-888-868-5988

E-mail: info@yg1usa.com

www.yg1usa.com

YG-1 CANADA INC.

3375 North Service Road, Unit A8, Burlington, ON, CANADA, L7N 3G2

Phone: +1-905-335-2500

Fax: +1-905-335-4003

E-mail: orders@yg1.ca

www.yg1.ca

HEAD OFFICE

13-40, Songdogwahak-ro 16beon-gil, Yeonsu-gu, Incheon 21984, South Korea

Notice YG-1 Global head office is relocating from December 2020 to a new address as above;

Phone: +82-32-526-0909

E-mail: yg1@yg1.kr

www.yg1.kr

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YG1YUTM210222001



THREAD MILLS

Threading a Range of Hole Sizes with the Same Thread Mill in a Wide Range of Materials

NEW with / without Coolant Hole
with Chamfer
Miniature

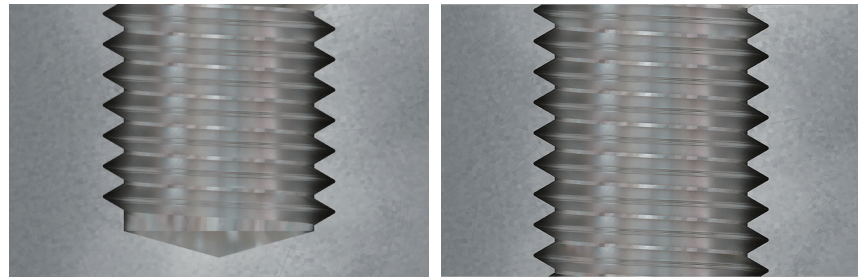
NEW SIZES without Coolant Hole
- M/UN Thread

PRODUCT FEATURES

THREAD MILLS VS. TAPPING

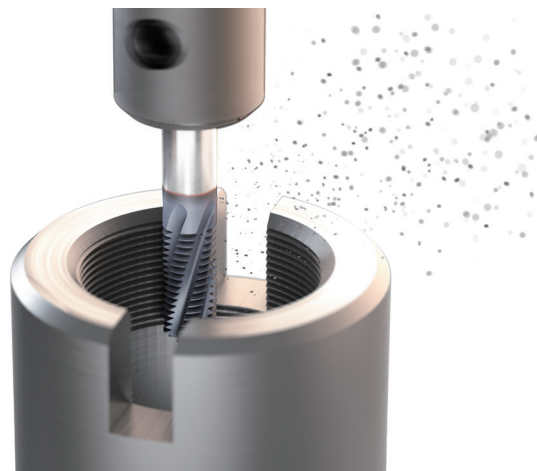
Versatility

- ▶ Able to thread a range of hole sizes with the same thread mill
- ▶ The same thread mill can produce right and left hand threads with a simple program change
- ▶ The same thread mill can produce threads in a wide range of materials
- ▶ Capable of producing full threads to the bottom of the hole
- ▶ The same thread mill can produce any Class of Fit
- ▶ Low cutting forces make thread mills a perfect solution for underpowered machines



Process Improvement

- ▶ Hold tight tolerance pitch diameters with program offset changes
- ▶ Very low chance of scrap with the ease of removing broken tools from the workpiece
- ▶ No issues with chip control as the short chips eliminate bird nesting typically associated with spiral flute taps
- ▶ Excellent thread finish with greater control over cutting condition than with tapping

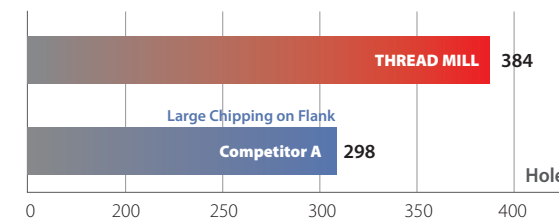


CASE STUDY

with Coolant Hole & Chamfer

▶ M10 x 1.5 Carbon Steel

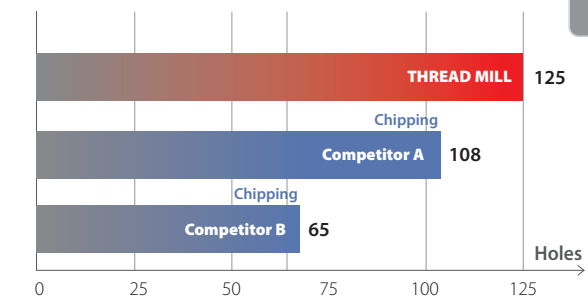
Tool	YG-1	Competitor A
Dimension	M8 x 1.25	M8 x 1.25
	Ø6.5x 16.8x 72	Ø6.2x 16.8x 72
Work Material	Carbon Steel (1045 / C45 / S45C) HB228 (HRc20)	
RPM	5,387 rev./min	
Vc (Tapping Speed)	360.9 ft./min.	
Feed per Tooth	.0012 in./tooth	
Tapping Depth	.63" (2xD)	
Holes	384	298
Cutting Fluid (Coolant)	External Cooling Water Soluble (9% Emulsion)	



Miniature Thread Mill

▶ M2x0.4 (TiAlN Coating), Tool Steel

Tool	YG-1	Competitor A	Competitor B
Dimension	M2 x 0.4	M2 x 0.4	M2 x 0.4
	Ø1.52x1.2(4.2)x57	Ø1.55x1.2x57	Ø1.5x1.2x40
Work Material	Tool Steel (SKD61 / X40CrMoV5-1 / H13) HB371 (HRc40)		
RPM	14,659 rev./min		
Vc (Tapping Speed)	229.7 ft./min.		
Feed per Tooth	.00047 in./tooth		
Tapping Depth	.16" (2xD)		
Holes	125	108	65
Cutting Fluid (Coolant)	External Cooling Water Soluble (9% Emulsion)		



ICON GUIDE

Work Piece Material



Tool Raw Material



Type of Shank



Helix Angle



Thread Angle



Coating

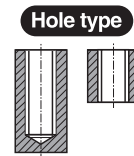
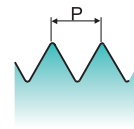
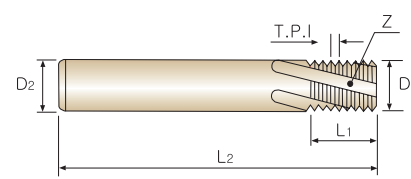


Cutting Condition Page



UN Solid Carbide Thread Mills ^{NEW SIZES} for Unified Internal Threads - ANSI B1.1

TiAIN **TE** SERIES



Unit : inch

* **NEW SIZE**

SIZE	Pitch TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
#2	64	.065	.125	.125	2.000	3	* TE100
#2	56	.065	.125	.125	2.000	3	TE080
#3	48	.075	.125	.167	2.000	3	TE120
#5	44	.095	.125	.228	2.000	3	TE220
#4	40	.085	.125	.175	2.000	3	TE160
#8	36	.115	.125	.250	2.000	3	TE300
#6	32	.100	.125	.218	2.000	3	TE240
#8	32	.115	.125	.250	2.000	3	TE280
#10	32	.120	.125	.312	2.000	3	TE340
1/2	32	.370	.375	1.000	3.500	4	TEF90
#10	28	.120	.125	.312	2.000	3	TEK90
1/4	28	.180	.187	.500	2.500	3	TE420
1/2	28	.370	.375	1.000	3.500	4	TE590
#10	24	.120	.125	.312	2.000	3	TE320
5/16	24	.235	.250	.625	2.500	3	TE460
3/8	24	.285	.312	.750	3.000	4	TE500
1/2	24	.370	.375	1.000	3.500	4	TE570
1/4	20	.180	.187	.500	2.500	3	TE400
7/16	20	.335	.375	.875	3.500	4	TE540
1/2	20	.370	.375	1.000	3.500	4	TE580
5/16	18	.235	.250	.625	2.500	3	TE440
9/16	18	.370	.375	.875	3.500	4	TE620
3/8	16	.285	.312	.750	3.000	4	TE480
3/4	16	.490	.500	1.250	3.500	4	TE720
7/16	14	.305	.312	.750	3.000	4	TE520
7/8	14	.490	.500	1.250	3.500	4	TE760
1/2	13	.350	.375	.875	3.500	4	TE560
9/16	12	.370	.375	.875	3.500	4	TE600

▶ NEXT PAGE

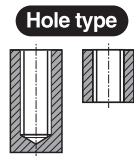
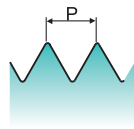
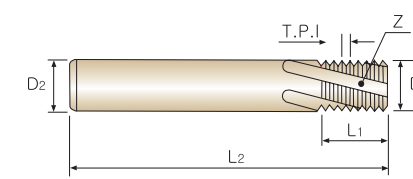
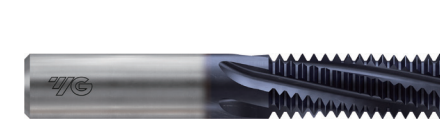
◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron		
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	15	30	25	38	34	15	30	25	38	34	15	30	25	38	34	400 Rm	1050 Rm	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

UN Solid Carbide Thread Mills ^{NEW SIZES} for Unified Internal Threads - ANSI B1.1

TiAIN **TE** SERIES



Unit : inch

* **NEW SIZE**

SIZE	Pitch TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
3/4	12	.495	.500	1.250	3.500	4	TE710
1	12	.745	.750	1.500	4.000	5	TE800
5/8	11	.470	.500	1.250	3.500	4	TE640
3/4	10	.495	.500	1.250	3.500	4	TE700
7/8	9	.620	.625	1.375	4.000	4	TE740
1	8	.620	.625	1.375	4.000	4	TE780
1-1/8 & 1-1/4	7	.745	.750	1.572	4.500	5	TE820
1 3/8	6	.745	.750	1.500	4.500	5	* TE900

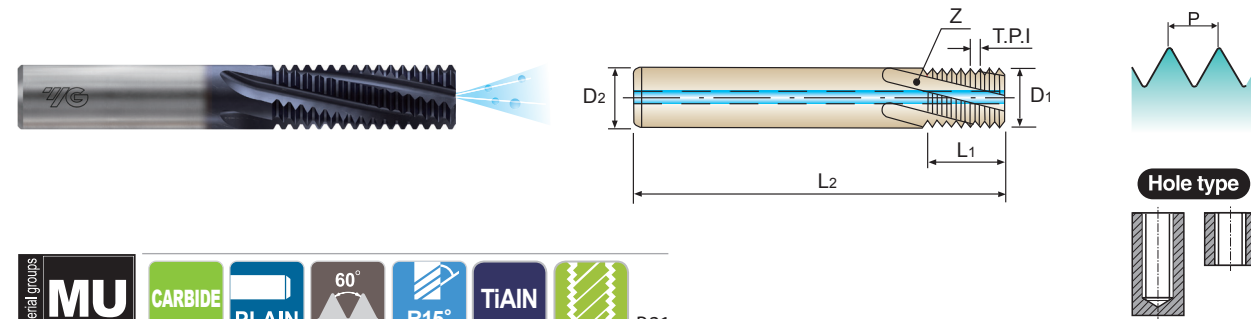
◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron		
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	15	30	25	38	34	15	30	25	38	34	15	30	25	38	34	400 Rm	1050 Rm	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

UN Solid Carbide Thread Mills with Coolant Hole for Unified Internal Threads - ANSI B1.1 NEW

TiAIN **L421E** SERIES



Unit : inch

SIZE	Pitch TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
1/2	32	.370	.375	1.000	3.500	4	L421EF90
1/4	28	.180	.187	.500	2.500	3	L421E420
1/2	28	.370	.375	1.000	3.500	4	L421E590
5/16	24	.235	.250	.625	2.500	3	L421E460
3/8	24	.285	.312	.750	3.000	4	L421E500
1/2	24	.370	.375	1.000	3.500	4	L421E570
1/4	20	.180	.187	.500	2.500	3	L421E400
7/16	20	.335	.375	.875	3.500	4	L421E540
1/2	20	.370	.375	1.000	3.500	4	L421E580
5/16	18	.235	.250	.625	2.500	3	L421E440
9/16	18	.370	.375	.875	3.500	4	L421E620
3/8	16	.285	.312	.750	3.000	4	L421E480
3/4	16	.490	.500	1.250	3.500	4	L421E720
7/16	14	.305	.312	.750	3.000	4	L421E520
7/8	14	.490	.500	1.250	3.500	4	L421E760
1/2	13	.350	.375	.875	3.500	4	L421E560
9/16	12	.370	.375	.875	3.500	4	L421E600
3/4	12	.495	.500	1.250	3.500	4	L421E710
1	12	.745	.750	1.500	4.000	5	L421E800
5/8	11	.470	.500	1.250	3.500	4	L421E640
3/4	10	.495	.500	1.250	3.500	4	L421E700
7/8	9	.620	.625	1.375	4.000	4	L421E740
1	8	.620	.625	1.375	4.000	4	L421E780
1-1/8" & 1-1/4"	7	.745	.750	1.572	4.500	5	L421E820
1-3/8"	6	.745	.750	1.500	4.500	5	L421E900

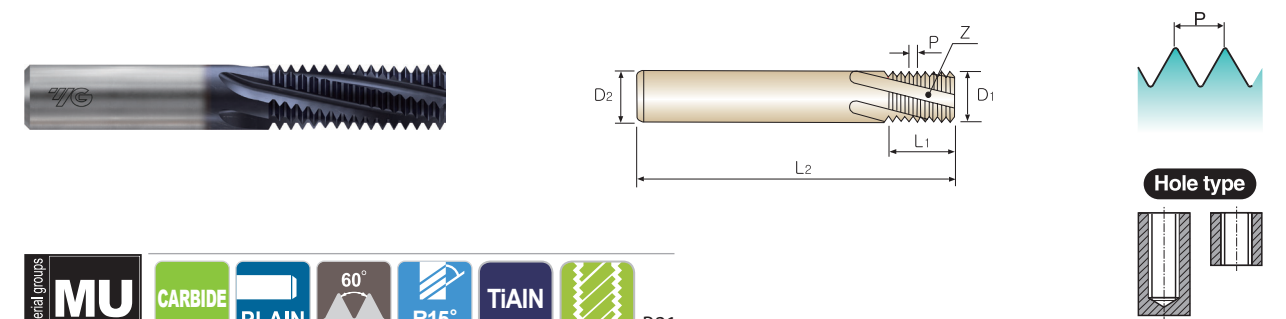
◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	15	30	25	38	34	15	30	25	38	34	200	280	250	350	320	400 Rm	1050 Rm	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

M Solid Carbide Thread Mills for Metric Internal Thread - DIN13 NEW SIZES

TiAIN **TD** SERIES



Unit : inch

SIZE	Pitch (mm) P	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
M3	0.50	.085	.125	.178	2.000	3	TD200
M4	0.70	.115	.125	.276	2.000	3	TD240
M4.5	0.75	.120	.125	.250	2.000	3	TD260
M8	0.75	.235	.250	.625	2.500	3	TD380
M5	0.80	.120	.125	.312	2.000	3	TD280
M6	1.00	.170	.187	.500	2.500	3	TD310
M10	1.00	.300	.312	.750	3.000	4	* TD440
M12	1.00	.360	.375	.875	3.500	4	TD530
M8	1.25	.235	.250	.625	2.500	3	TD360
M10	1.50	.300	.312	.750	3.000	4	TD420
M14	1.50	.370	.375	.875	3.500	4	TD550
M18	1.50	.490	.500	1.250	3.500	4	TD670
M12	1.75	.360	.375	.875	3.500	4	TD500
M14	2.00	.370	.375	1.125	3.500	4	* TD540
M16	2.00	.470	.500	1.250	3.500	4	TD600
M20	2.50	.495	.500	1.250	3.500	4	TD700
M24	3.00	.620	.625	1.375	4.000	4	TD780

* NEW SIZE

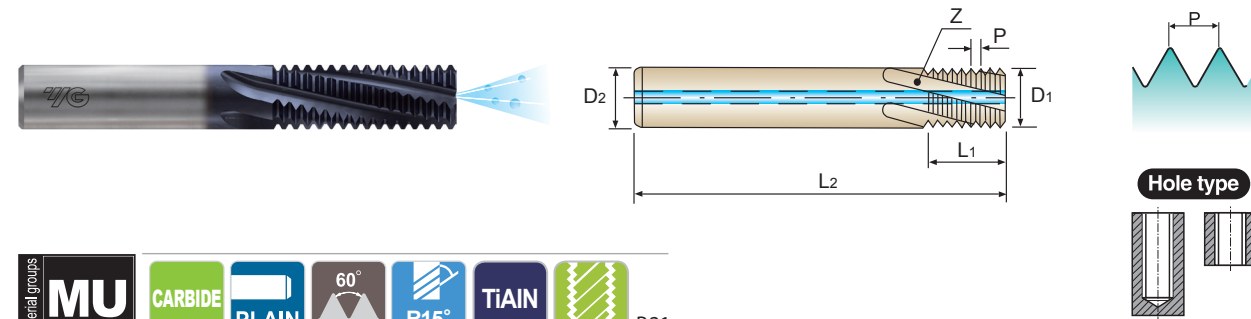
◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21	
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	15	30	25	38	34	15	30	25	38	34	200	280	250	350	320	400 Rm	1050 Rm	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

M Solid Carbide Thread Mills with Coolant Hole NEW for Metric Internal Thread - DIN13

TiAIN **L421D** SERIES

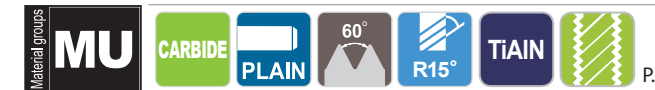
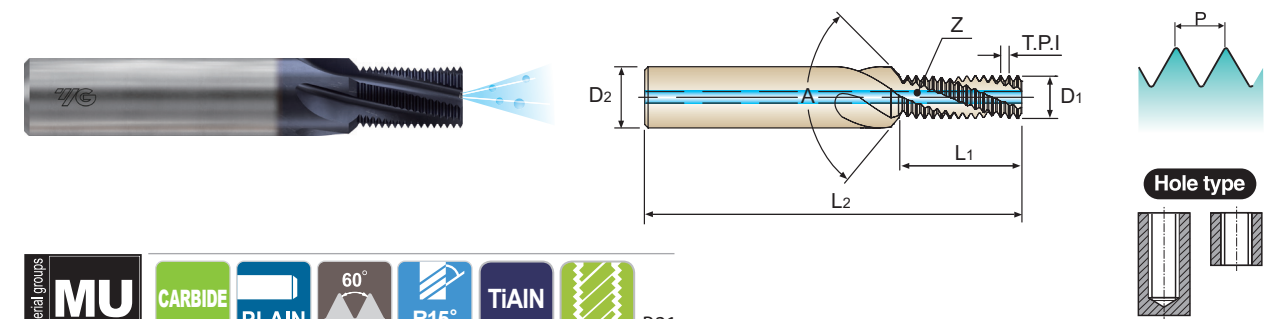


Unit : inch

SIZE	Pitch (mm)	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute	EDP No.	
							TiAIN	
M8	0.75	.235	.250	.625	2.500	3	L421D380	
M6	1.00	.170	.187	.500	2.500	3	L421D310	
M10	1.00	.300	.312	.750	3.000	4	L421D440	
M12	1.00	.360	.375	.875	3.500	4	L421D530	
M8	1.25	.235	.250	.625	2.500	3	L421D360	
M10	1.50	.300	.312	.750	3.000	4	L421D420	
M14	1.50	.370	.375	.875	3.500	4	L421D550	
M18	1.50	.490	.500	1.250	3.500	4	L421D670	
M12	1.75	.360	.375	.875	3.500	4	L421D500	
M14	2.00	.370	.375	1.125	3.500	4	L421D540	
M16	2.00	.470	.500	1.250	3.500	4	L421D600	
M20	2.50	.495	.500	1.250	3.500	4	L421D700	
M24	3.00	.620	.625	1.375	4.000	4	L421D780	

UN Solid Carbide Thread Mills with Coolant Hole & Chamfer NEW for Unified Internal Threads - ANSI B1.1

TiAIN **L427E** SERIES



Unit : inch

SIZE	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute	EDP No.	
								TiAIN	
1/4	28	.205	.312	.500	2.500	90°	3	L427E420	
3/8	24	.325	.500	.750	3.000	90°	4	L427E500	
1/4	20	.190	.312	.500	2.500	90°	3	L427E400	
1/2	20	.435	.625	1.000	3.500	90°	4	L427E580	
5/16	18	.240	.375	.625	2.500	90°	3	L427E440	
3/8	16	.290	.375	.750	3.000	90°	4	L427E480	
3/4	16	.655	.750	1.500	4.000	90°	5	L427E720	
7/16	14	.335	.500	.750	3.500	90°	4	L427E520	
1/2	13	.385	.500	1.000	3.500	90°	4	L427E560	
9/16	12	.455	.625	1.200	3.500	90°	4	L427E600	
5/8	11	.515	.625	1.250	3.500	90°	4	L427E640	
3/4	10	.630	.750	1.500	4.000	90°	5	L427E700	

◎ : Excellent ○ : Good

ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron	Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21
HRc	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34		55	60	42	55	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

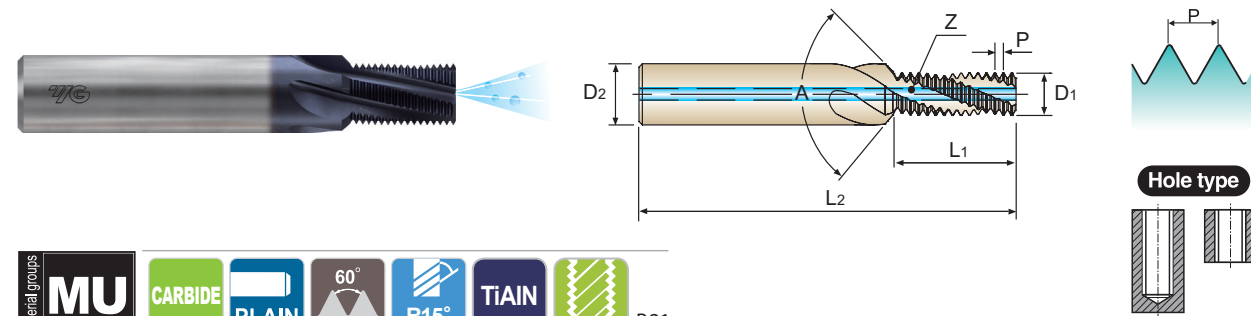
◎ : Excellent ○ : Good

ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron	Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323	1	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21
HRc	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34		55	60	42	55	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

M Solid Carbide Thread Mills with Coolant Hole & Chamfer NEW for Metric Internal Thread - DIN13

TiAIN **L427D** SERIES

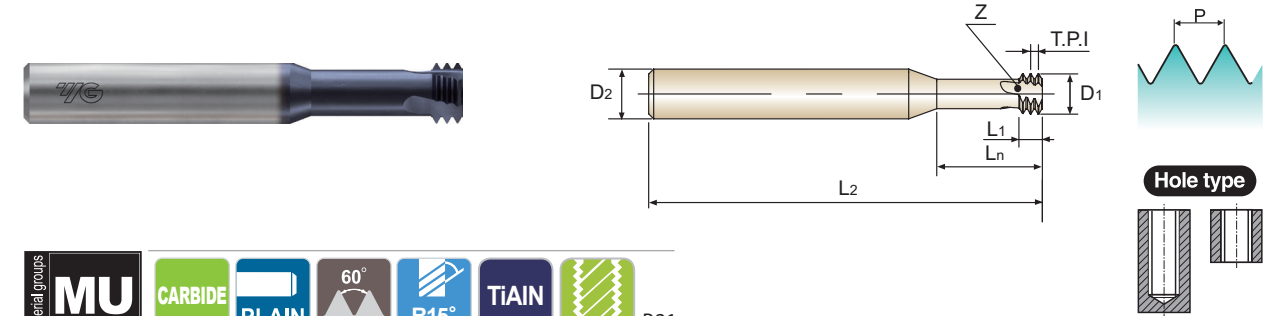


Unit : inch

SIZE	Pitch (mm)	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute	EDP No.	
								TiAIN	
M6	1.00	.185	.312	.500	2.500	90°	3	L427D310	
M8	1.25	.250	.375	.630	2.500	90°	3	L427D360	
M10	1.50	.315	.500	.790	3.000	90°	4	L427D420	
M12	1.75	.370	.500	.950	3.500	90°	4	L427D500	

UN Solid Carbide Miniature Thread Mills NEW for Unified Internal Threads - ANSI B1.1

TiAIN **L12DE** SERIES



Unit : inch

SIZE	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute	EDP No.	
								TiAIN	
#1	64	.055	.250	.047	.165	2.500	3	L12DE040	
#2	56	.065	.250	.054	.197	2.500	3	L12DE080	
#3	48	.075	.250	.063	.236	2.500	3	L12DE120	
#4	40	.083	.250	.075	.236	2.500	3	L12DE160	
#8	36	.130	.250	.083	.343	2.500	3	L12DE300	
#6	32	.100	.250	.094	.292	2.500	3	L12DE240	
#8	32	.126	.250	.094	.394	2.500	3	L12DE280	
#10	32	.150	.250	.094	.406	2.500	3	L12DE340	
1/4	28	.207	.250	.107	.520	2.500	3	L12DE420	
#10	24	.141	.250	.125	.402	2.500	3	L12DE320	
5/16	24	.263	.312	.125	.650	2.500	3	L12DE460	
1/4	20	.192	.250	.150	.528	2.500	3	L12DE400	
7/16	20	.360	.375	.150	.906	2.500	4	L12DE540	
5/16	18	.242	.312	.167	.650	2.500	3	L12DE440	
3/8	16	.264	.375	.188	.752	2.500	3	L12DE480	
7/16	14	.354	.375	.214	.917	2.500	4	L12DE520	
1/2	13	.407	.500	.231	1.080	3.000	4	L12DE560	
9/16	12	.465	.500	.250	1.240	3.500	4	L12DE600	

◎ : Excellent ○ : Good

ISO Material Description	P										M			K																											
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron			Nodular cast iron			Malleable cast iron																		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25		21																					
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230																					
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	◎	◎	◎	◎

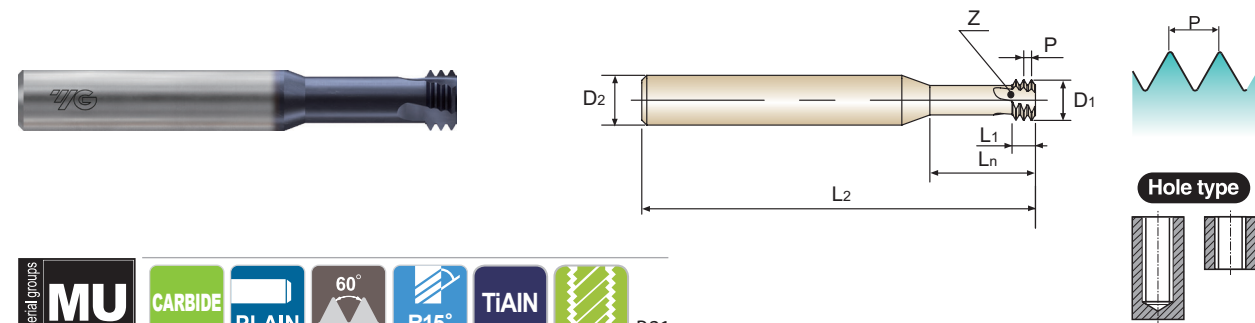
◎ : Excellent ○ : Good

ISO Material Description	P										M			K																											
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron			Nodular cast iron			Malleable cast iron																		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25		21																					
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230																					
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	◎	◎	◎	◎

M Solid Carbide Miniature Thread Mills NEW for Metric Internal Thread - DIN13

TiAIN **L12DD** SERIES

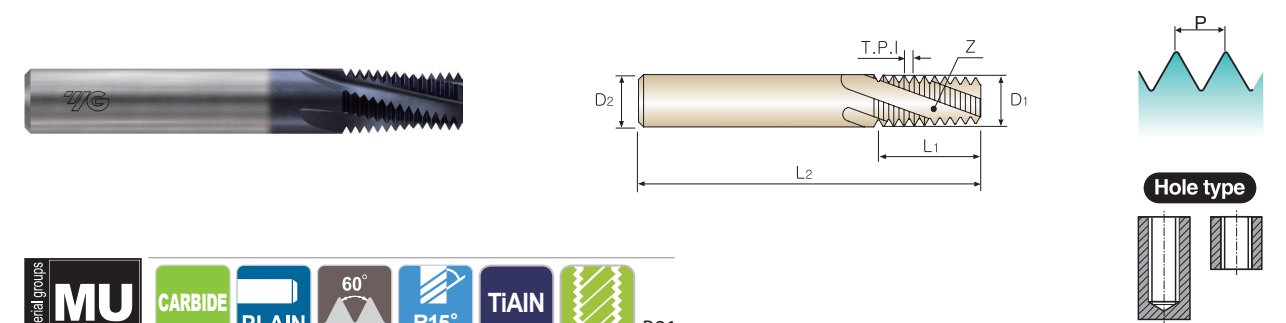


Unit : inch

SIZE	Pitch (mm)	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute	EDP No.
	P	D1	D2	L1	Ln	L2	Z	TiAIN
M1.6	0.35	.047	.125	.041	.134	2.500	3	L12DD090
M2	0.40	.061	.250	.047	.165	2.500	3	L12DD130
M2.2	0.45	.065	.250	.053	.181	2.500	3	L12DD150
M2.5	0.45	.077	.250	.053	.205	2.500	3	L12DD170
M3	0.50	.094	.250	.059	.244	2.500	3	L12DD200
M3.5	0.60	.108	.250	.071	.287	2.500	3	L12DD220
M4	0.70	.124	.250	.083	.327	2.500	3	L12DD240
M4.5	0.75	.133	.250	.089	.369	2.500	3	L12DD260
M5	0.80	.159	.250	.094	.409	2.500	3	L12DD280
M6	1.00	.189	.250	.118	.492	2.500	3	L12DD310
M8	1.25	.256	.312	.148	.654	2.500	3	L12DD360
M10	1.50	.323	.375	.177	.819	2.500	4	L12DD420
M12	1.75	.371	.375	.207	.984	2.500	4	L12DD500

NPT Solid Carbide Thread Mills for NPT Thread - ANSI B 1.20.1

TiAIN **TF** SERIES



Unit : inch

SIZE	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute	EDP No.
	TPI	D1	D2	L1	L2	Z	TiAIN
1/16 & 1/8	27	.245	.250	.437	2.500	3	TF020
1/4 & 3/8	18	.305	.312	.625	3.000	4	TF400
1/4 & 3/8	18	.363	.375	.680	3.500	4	TF480
1/2 & 3/4	14	.495	.500	.875	3.500	4	TF560
1" - 2"	11.5	.620	.625	1.125	4.000	4	TF780
2-1/2" - 6"	8	.745	.750	1.500	5.000	4	TFF40

◎ : Excellent ○ : Good

ISO Material Description	P										M			K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron	Nodular cast iron	Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	35	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

◎ : Excellent ○ : Good

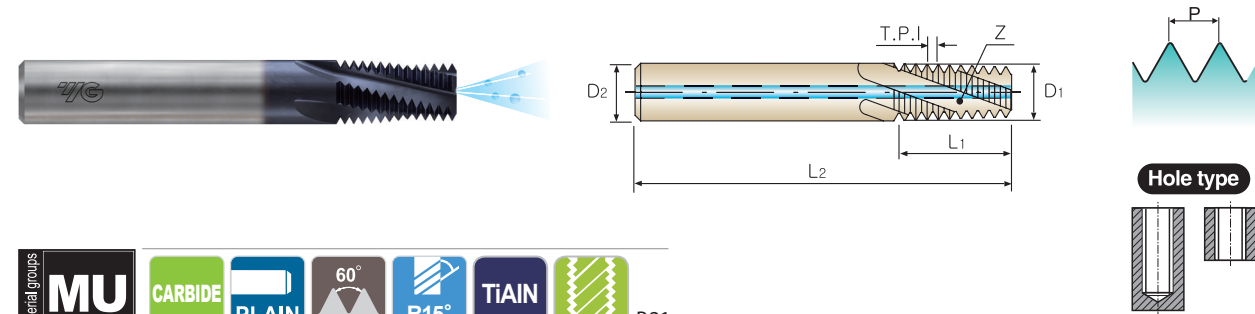
ISO Material Description	P										M			K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron	Nodular cast iron	Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	35	38	40	42	45	48	50	52	55	58	60	62	65	68	70	72
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

NPT Solid Carbide Thread Mills with Coolant Hole for NPT Thread - ANSI B 1.20.1

NEW

TiAIN L621F SERIES

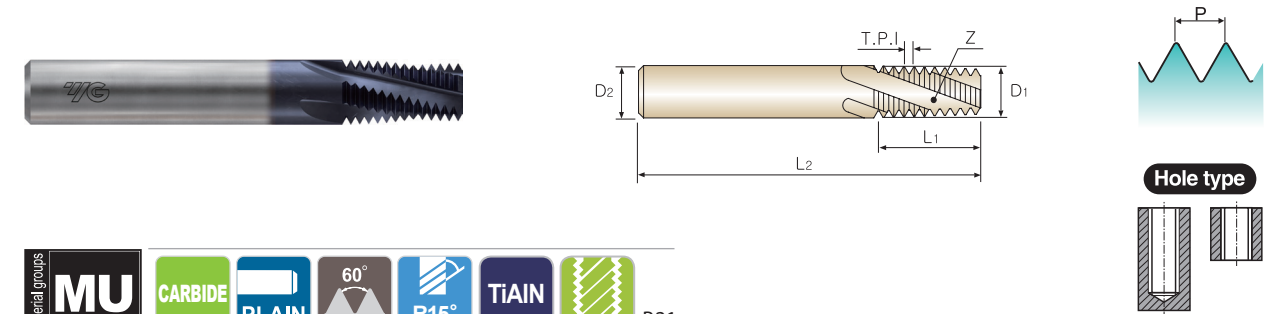


Unit : inch

SIZE	Pitch TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
1/6 & 1/8	27	.245	.250	.437	2.500	3	L621F020
1/4 & 3/8	18	.305	.312	.625	3.000	4	L621F400
1/4 & 3/8	18	.363	.375	.680	3.500	4	L621F480
1/2 & 3/4	14	.495	.500	.875	3.500	4	L621F560
1" - 2"	11.5	.620	.625	1.125	4.000	4	L621F780
2-1/2" - 6"	8	.745	.750	1.500	5.000	4	L621FF40

NPTF Solid Carbide Thread Mills for NPTF Thread - ANSI B 1.20.3

TiAIN TG SERIES



Unit : inch

SIZE	Pitch TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
1/16 & 1/8	27	.245	.250	.437	2.500	3	TG020
1/4 & 3/8	18	.305	.312	.625	3.000	4	TG400
1/2 & 3/4	14	.495	.500	.875	3.500	4	TG560
1" - 2"	11.5	.620	.625	1.125	4.000	4	TG780
2-1/2" - 6"	8	.745	.750	1.500	5.000	4	TGF40

◎ : Excellent ○ : Good

ISO Material Description	P										M			K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron	Nodular cast iron	Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N				S						H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials			Heat Resistant Super Alloys			Titanium Alloys	Hardened steel	Chilled Cast Iron	Hardened Cast Iron				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	55	60	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

◎ : Excellent ○ : Good

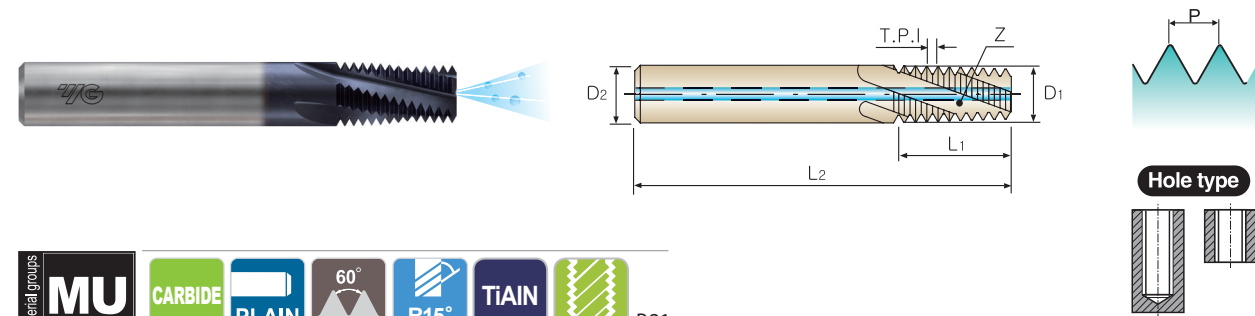
ISO Material Description	P										M			K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron	Nodular cast iron	Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	N				S						H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials			Heat Resistant Super Alloys			Titanium Alloys	Hardened steel	Chilled Cast Iron	Hardened Cast Iron				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	55	60	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

NPTF Solid Carbide Thread Mills with Coolant Hole for NPTF Thread - ANSI B 1.20.3

NEW

TiAIN **L621G** SERIES



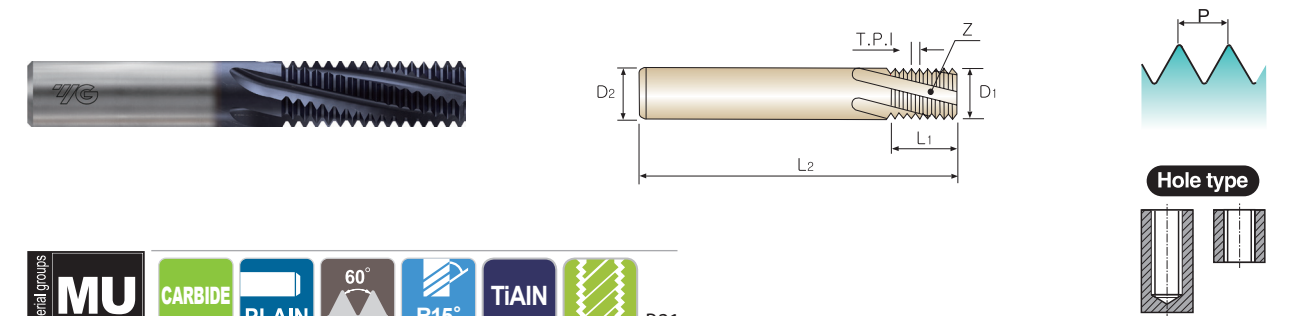
Unit : inch

SIZE	Pitch TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
1/16 & 1/8	27	.245	.250	.437	2.500	3	L621G020
1/4 & 3/8	18	.305	.312	.625	3.000	4	L621G400
1/2 & 3/4	14	.495	.500	.875	3.500	4	L621G560
1" - 2"	11.5	.620	.625	1.125	4.000	4	L621G780
2-1/2" - 6"	8	.745	.750	1.500	5.000	4	L621GF40

NPS Solid Carbide Thread Mills for NPS Thread - ANSI B 1.20.1

NEW

TiAIN **L121K** SERIES



Unit : inch

SIZE	Pitch TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
1/8	27	.245	.250	.556	2.500	3	L121K020
1/4 & 3/8	18	.363	.375	.833	3.500	4	L121K400
1/2 & 3/4	14	.495	.500	1.071	3.500	4	L121K560
1" - 2"	11.5	.620	.625	1.304	4.000	4	L121K780

◎ : Excellent ○ : Good

ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	45	15	23	28	35	10	26	3	25	10	21	
HB	125	190	250	270	300	180	275	300	350	400	200	325	200	240	180	260	160	250	130	230	
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	◎	◎	◎	◎	◎	◎	

ISO Material Description	N				S						H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials			Heat Resistant Super Alloys			Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron			
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	◎	◎	◎	◎

◎ : Excellent ○ : Good

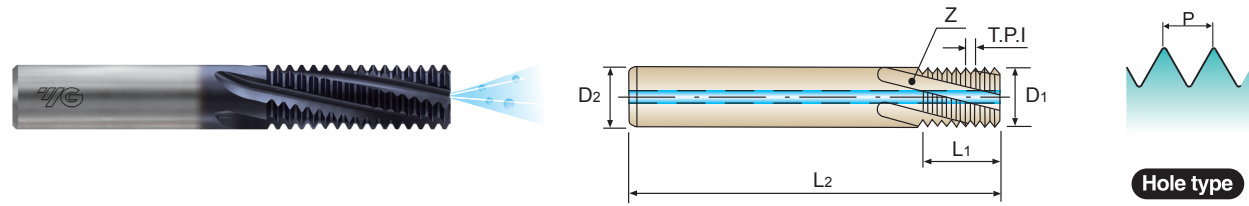
ISO Material Description	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	38	10	29	32	38	45	15	23	28	35	10	26	3	25	10	21	
HB	125	190	250	270	300	180	275	300	350	400	200	325	200	240	180	260	160	250	130	230	
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	◎	◎	◎	◎	◎	◎	

ISO Material Description	N				S						H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials			Heat Resistant Super Alloys			Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron			
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	◎	◎	◎	◎

NPS Solid Carbide Thread Mills with Coolant Hole for NPS Thread - ANSI B 1.20.1

NEW

TiAIN L421K SERIES



Unit : inch

SIZE	Pitch TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Overall Length L2	No. of Flute Z	EDP No.
							TiAIN
1/8	27	.245	.250	.556	2.500	3	L421K020
1/4 & 3/8	18	.363	.375	.833	3.500	4	L421K400
1/2 & 3/4	14	.495	.500	1.071	3.500	4	L421K560
1" - 2"	11.5	.620	.625	1.304	4.000	4	L421K780

◎ : Excellent ○ : Good

ISO	P										M			K							
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel			Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Hrc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	◎	◎	◎	◎	◎	◎	

ISO	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Hrc	60	100	75	90	130	110	90	100			15	30	25	38	34	200	280	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	○	○	○

RECOMMENDED CUTTING SPEED AND FEED

ISO	VDI 3323	Material Description	HB	HRC	Cutting Speed (SFM)		Feed per tooth (inch/tooth)			
					without Coolant Hole with Coolant & Chamfer	Miniature	without Coolant Hole with Coolant & Chamfer		Miniature	
							D1≤.3125	D1>.3125	D1≤.3125	D1>.3125
P	1	Non-alloy steel	125		250-400	220-380	.0010-.0020	.0020-.0038	.0008-.0022	.0022-.0042
			190	13	250-370	220-380	.0008-.0016	.0016-.0034	.0008-.0018	.0018-.0038
			250	25	250-360	220-380	.0008-.0016	.0016-.0034	.0008-.0018	.0018-.0038
			270	28	230-330	220-350	.0006-.0014	.0014-.0030	.0006-.0016	.0016-.0036
			300	32	230-320	220-300	.0006-.0014	.0014-.0030	.0006-.0016	.0016-.0036
	2	Low alloy steel	180	10	250-360	220-350	.0008-.0016	.0016-.0034	.0008-.0020	.0020-.0040
			275	29	230-330	220-350	.0006-.0014	.0014-.0030	.0006-.0018	.0018-.0038
			300	32	230-320	200-300	.0006-.0014	.0014-.0030	.0006-.0018	.0018-.0038
			350	38	200-300	200-300	.0006-.0014	.0014-.0030	.0006-.0018	.0018-.0038
			200	15	230-320	220-350	.0008-.0016	.0016-.0034	.0008-.0020	.0020-.0040
			325	35	200-300	220-350	.0006-.0014	.0014-.0026	.0006-.0018	.0018-.0042
M	3	Stainless steel	200	15	200-250	200-250	.0006-.0010	.0010-.0022	.0006-.0016	.0016-.0028
			240	23	200-250	200-250	.0004-.0008	.0008-.0018	.0004-.0014	.0014-.0026
			180	10	150-250	180-220	.0006-.0010	.0010-.0022	.0006-.0016	.0016-.0028
K	4	Grey cast iron	180	10	250-400	300-500	.0012-.0020	.0020-.0041	.0012-.0024	.0024-.0046
			260	26	250-360	300-500	.0008-.0016	.0016-.0034	.0008-.0020	.0020-.0042
			160	3	250-400	280-450	.0012-.0020	.0020-.0041	.0012-.0024	.0024-.0046
			250	25	230-320	250-400	.0008-.0016	.0016-.0034	.0008-.0020	.0020-.0042
			130		230-320	250-400	.0008-.0016	.0016-.0034	.0008-.0020	.0020-.0042
230	21	230-350	280-450	.0012-.0020	.0020-.0041	.0012-.0024	.0024-.0046			
N	5	Aluminum-wrought alloy	60		500-1000	400-1000	.0024-.0032	.0032-.0049	.0020-.0034	.0034-.0060
			100		400-800	400-900	.0020-.0028	.0028-.0041	.0016-.0030	.0030-.0056
			75		350-900	300-900	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048
	6	Aluminum-cast, alloyed	90		350-900	300-900	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048
			130		350-800	350-800	.0008-.0016	.0016-.0030	.0004-.0018	.0018-.0044
			110		500-800	400-700	.0016-.0024	.0024-.0038	.0012-.0026	.0026-.0052
			90		350-800	350-700	.0016-.0024	.0024-.0038	.0012-.0026	.0026-.0052
	7	Copper and Copper Alloys (Bronze / Brass)	90		350-800	350-700	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048
			100		300-600	300-600	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048
					350-900	350-700	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048
8	Non Metallic Materials			350-900	350-700	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048	
				350-900	350-700	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048	
				350-900	350-700	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048	
				350-900	350-700	.0012-.0020	.0020-.0034	.0008-.0022	.0022-.0048	
S	9	Heat Resistant Super Alloys	200	15	100-200	150-250	.0004-.0008	.0008-.0014	.0004-.0008	.0008-.0018
			280	30	70-180	130-200	.0002-.0006	.0006-.0014	.0002-.0006	.0006-.0016
			250	25	50-140	100-160	.0002-.0006	.0006-.0010	.0002-.0006	.0006-.0016
			350	38	50-120	100-160	.0002-.0006	.0006-.0010	.0002-.0006	.0006-.0016
	10	Titanium Alloys	320	34	50-140	120-180	.0002-.0006	.0006-.0009	.0002-.0006	.0006-.0016
			400 Rm		100-250	80-200	.0006-.0010	.0010-.0022	.0006-.0010	.0010-.0026
			1050 Rm		60-140	80-120	.0002-.0006	.0006-.0010	.0002-.0006	.0006-.0016

* without Coolant Hole : TE, TD, TF, TG, L121K
 * with Coolant Hole : L421E, L421D, L621F, L621G, L421K
 * with Coolant & Chamfer : L427E, L427D
 * Miniature : L12DE, L12DD



YG-1 TM Xpert provides user-oriented data and display with user friendly Interface

The screenshot displays the YG-1 TM Xpert web interface. The main configuration area includes the following settings:

- 1 Thread Type: Internal Right Hand
- 2 Thread Form: M - Metric
- 3 D = Thread Diameter: M1
- 4 Pitch / TPI: 0.250
- 5 L = Thread Length: 0 mm
- 6 Materials: Steel (selected)
- 7 Thread Milling Type: Thread Milling
- 8 Recommend Thread mills: M030070C0.75 0.25P MINI L1201010

The right sidebar contains visual diagrams and data tables:

Thread Data

Nominal Diameter (D)	1.000
Pitch/TPI	0.250
Thread Length (L)	0 mm
Thread Angle	60°

Tool Data

Description:	M030070C0.75 0.25P MINI L1201010	No. of Flute(s):	3
ID# No.:	L1201010	Spiral Angle:	15°
Thread Form:	M-Metric	Shank:	DMG525 HA
Thread Mill Type:	Miniature Thread Mill	Thread Angle:	60°
Material:	Solid Carbide	Coating:	TiAlN
Internal/External:	Internal	Chamber Angle:	-
Nominal Diameter (D):	M1	Effect. Diameter(D _e):	-
Pitch / TPI:	0.25	Drill Diameter(D _d):	-
Cutting Diameter (D _c):	0.7 mm	Drill Length(L _d):	-
Shank Diameter (d):	3 mm	Max. C _{max} (D _c):	-
Overall Length (L _t):	30 mm	Effect. Length(L _e):	-
Thread Length (L _t):	2.1 mm	Coating:	without Coolant Hole
Neck Length (L _n):	2.1 mm		

<https://www.yg1.kr/threadmill/tool/>

YG-1 has released a new Thread Milling Program Generator, 'YG-1 TM Xpert' on its website. This launch mainly focuses on significantly developing the design and displaying the relevant images, drawings, and data at a glance for easy use and benefit all users.

YG-1 TM Xpert is a program that generates G Code required for thread milling with CNC machine. With the left side bar menu, users can select the thread type, thread form, work materials, thread milling type and cutting condition or change the options easily according to their needs. Moreover, not only the data can be saved as text file but also can be printed out directly or transferred via email.

It can be also accessed by PC and the smartphone at present, and provides responsive web design and optimized visual interface on various individual devices.